UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,176	04/23/2001	Scott William Bennett	06551.0069	4868

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EXAMINER
SAIN, GAUTAM

ART UNIT	PAPER NUMBER
2176	

DATE MAILED: 08/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *31 May 2005*.

2a) ☒ This action is **FINAL**.   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
   closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-16,35-57 and 63-65* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-16,35-57, 63-65* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a) ☐ All   b) ☐ Some * c) ☐ None of:

   1. ☐ Certified copies of the priority documents have been received.

   2. ☐ Certified copies of the priority documents have been received in Application No. _____.

   3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage
      application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1)   This is a Final Rejection in response to the Remarks/Arguments filed on

5/31/2005.

2)   Claims 1-16,35-57, 63-65 are pending in this application.

3)   Examiner does not introduce any new reference in this action. Examiner

responds to the Remarks/Arguments by the applicant (see below).

Correction of Inventorship

4)   In view of the papers filed 5/31/05, it has been found that this nonprovisional

application, as filed, through error and without deceptive intent, improperly set forth the

inventorship, and accordingly, this application has been corrected in compliance with 37

CFR 1.48(a). The inventorship of this application has been changed by adding Mila

Ramos-Santacruz as a co-inventor along with the previously listed inventors, Chinatsu

Aone and Scott Bennett.

The application will be forwarded to the Office of Initial Patent Examination

(OIPE) for issuance of a corrected filing receipt, and correction of Office records to

reflect the inventorship as corrected.

Claim Rejections - 35 USC § 103

5)   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

5-1)   Claims 1, 2, 4, 5, 6, 7, 8, 10, 11, 12, 13, 14, 15, 16, 35, 36, 38, 39, 40, 41, 43, 44, 45, 46, 47, 48, 54, 55, 56, 67, 63, 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over <u>Belfiore</u> et al (US 2002/0059425, provisional application 60/213562, filed Jun 22, 2000), in view of Non Patent Literature "REES: A Large-Scale Relation and Event Extraction System," Proceedings of the Sixth Natural Language Processing Conference (ANLP-2000) by Chinatsu Aone and Mila Ramos-Santacruz (hereinafter "<u>Aone</u>")(effective date May 4, 2000, see Applied Natural Language Processing 2000 document for date).

Claim 1, 63, 65, Belfiore teaches

receiving at the server content addressed to a particular device (address of web page requested by user to destination that is processed through the server)(paragraph 7);

generating a form containing data extracted from the content (ie., creating ad hoc templates ... Template generation)(para 113) and

making available to the particular device a notification of the event (ie., event notification service that passes messages to device)(para 18).

Belfiore does not teach, but Aone teaches

typing at least one event reflected by the content (ie., event extraction system, fig 2 shows ATTACK target event template for a sentence)(section 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Belfiore to include an event extraction system that generates a template for events as taught by Aone, providing the benefit of Natural Language Processing for large-scale relation and event extraction system (Aone, Title, Abstract) and data

structure that follow a schema in which the meaning of the communication for intelligent

decisions and inferences made on the based on the meaning of the data (Belfiore,

Abstract section).

Claim 2, Belfiore does not expressly teach, but Aone teaches

extracting data from the content, the extracted data including a set of data

elements (ie., Fig 2 shows example of event template for a sentence);

filling fields of a set of templates with the data elements by matching fields to

the data elements according to a determined type for each data element (ie., fig 2

shows matching the sentences with the data types WEAPON – missles), and

identifying the event based on the filled fields of the templates (ie., fig 2 shows event in

sentence is identified as Type: conflict).

It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify Belfiore to include events as templates for natural sentences where a type is

matched to the sentence and identifies the type of the event as taught by Aone,

providing the benefit of Natural Language Processing for large-scale relation and event

extraction system (Aone, Title, Abstract) and data structure that follow a schema in

which the meaning of the communication for intelligent decisions and inferences made

on the based on the meaning of the data (Belfiore, Abstract section).

Claim 4, Belfiore teaches

Receiving at the central controller content including unstructured text addressed to a

particular device (address of web page requested by user to destination that is

processed through the server)(paragraph 7);

generating a form containing data extracted from the unstructured text (ie., creating ad

hoc templates ... Template generation)(para 113) ; and

making available to the padicular device a notification of the event (ie., event notification

service that passes messages to device)(para 18);

Belfiore does not expressly teach, but Aone teaches

typing at least one event reflected by the unstructured text (ie., fig 2 shows event in

sentence is identified as Type: conflict).

It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify Belfiore to include events as templates for natural sentences where a type is

matched to the sentence and identifies the type of the event as taught by Aone,

providing the benefit of Natural Language Processing for large-scale relation and event

extraction system (Aone, Title, Abstract) and data structure that follow a schema in

which the meaning of the communication for intelligent decisions and inferences made

on the based on the meaning of the data (Belfiore, Abstract section).

Claim 5, Belfiore does not expressly teach, but Aone teaches

identifying the event in the unstructured text (ie., fig 2 shows event in sentence is

identified as Type: conflict); and

identifying an event type for the event based on stored information reflecting

event types (ie., REES extracts and identifies the 61 types of events from event

ontology)(sec 1.2; fig 1, Table 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify Belfiore to include events that are identified in sentences as a type where the

system extracts and identifies the types of events from the event ontology as taught by

Aone, providing the benefit of Natural Language Processing for large-scale relation and

event extraction system (Aone, Title, Abstract) and data structure that follow a schema

in which the meaning of the communication for intelligent decisions and inferences

made on the based on the meaning of the data (Belfiore, Abstract section).

Claim 6, Belfiore does not expressly teach, but Aone teaches

selecting a form type from a set of forms based on the type of event (ie., the Person-

Affilitation relation template is chosen based on encryption)(section 1, fig 1); and

populating fields of a blank form of the selected form type with the data from

the unstructured text (ie., template fields are populated for the event)(fig 1, 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify Belfiore to include relationships based on types identified and populating

template fields for an event as taught by Aone, providing the benefit of Natural

Language Processing for large-scale relation and event extraction system (Aone, Title,

Abstract) and data structure that follow a schema in which the meaning of the

communication for intelligent decisions and inferences made on the based on the

meaning of the data (Belfiore, Abstract section).

Claim 7, Belfiore does not teach, but Aone teaches

populating fields of a form selected from a set of forms based on the type of

event with the data from the unstructured text (ie., table 3 shows the system recall.

Once those event types ar stored in the event ontology, they can be recalled upon

future extractions)(section 3).

It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify Belfiore to include storing events in the event ontology for later recall and

reuse as taught by Aone, providing the benefit of Natural Language Processing for

large-scale relation and event extraction system (Aone, Title, Abstract) and data

structure that follow a schema in which the meaning of the communication for intelligent

decisions and inferences made on the based on the meaning of the data (Belfiore,

Abstract section).

Claim 8, 41, Belfiore teaches

transmitting the notification of the event to the particular device (ie., content of message

transmitted from host to a client device 110, fig 1 of events 155 over 190).

Claim 10, Belfiore does not teach, but Aone teaches

sending at least one of

(i) the form, (ix) a summary of the unstructured text, and

(x) the form and a summary of the unstructured text (ie., template goes back and forth

between REES and the user GUI, through the template tool)(fig 3, sec 2).

It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify Belfiore to include a template processing system between a server and user

GUI with processing from the template tool as taught by Aone, providing the benefit of

Natural Language Processing for large-scale relation and event extraction system

(Aone, Title, Abstract) and data structure that follow a schema in which the meaning of

the communication for intelligent decisions and inferences made on the based on the

meaning of the data (Belfiore, Abstract section).

Claim 11, 44 Belfiore teaches

identifying an application from the set of applications executable by the

particular device based on the type of event (ie., based on a set of observed events or

stored events transferred into action)(para 121-122); and

invoking an inteface associated with the identified application (ie., user interface

supports use of personal device)(para 115).

Claim 12. Belfiore teaches

Integrating information associated with the event notification with data managed by the

identified application (ie., the computer device to understand component ... perform

intelligent action locally stored schema ... event notification service ...)(para 18).

Claim 13, 45, Belfiore teaches

At least one of a calendar application for managing event data associated with a

calendar', a task manager for managing event data associated with tasks', an

address book for managing event data associated with contact information for

entities', and a pofolio manager for managing event data associated with a pofolio.

(ie., calendar)(para 73).

Claim 14, 46, Belfiore teaches

forming an icon reflecting the event (ie., send icon)(para 6), and

sending data to the particular device to generate the icon (ie., send icon on a computer

display routed over the internet)(para 6).

Claim 15, 47, Belfiore teaches

forming an audio message reflecting the event (ie., input/output component ... user

interface converts text to audio)(para 94); and

sending data to the particular device to generate the audio message (ie., audio

message)(para 95).

Claim 16, 48, Belfiore teaches

forming a visual message reflecting the event (ie., typed email message displayed

visually on text based email displayed through video); *and*

sending data to the particular device to generate the visual message (ie., where

message displayed through video on client PC, which is sent from the server across the

communications link)(para 94).

Claim 35, Belfiore teaches

receiving at the central controller content addressed to a particular device (address of

web page requested by user to destination that is processed through the

server)(paragraph 7);

generating a form containing data extracted from the content (ie., creating ad hoc

templates ... Template generation)(para 113) and

making available to the particular device a notification of the event (ie., event notification

service that passes messages to device)(para 18).

Belfiore does not teach, but Aone teaches

typing at least one event reflected by the content (ie., event extraction system, fig 2

shows ATTACK target event template for a sentence)(section 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify Belfiore to include an event extraction system that generates a template for

events as taught by Aone, providing the benefit of Natural Language Processing for

large-scale relation and event extraction system (Aone, Title, Abstract) and data

structure that follow a schema in which the meaning of the communication for intelligent

decisions and inferences made on the based on the meaning of the data (Belfiore,

Abstract section).

Claim 36, Belfiore teaches

a processor (ie., server 120)(para 47); and

a memory storing instructions executable by the processor to

receive content addressed to a particular device (address of web page requested by

user to destination that is processed through the server)(paragraph 7) ,

perform to generate a message in a data representation language containing data

reflecting an event extracted from the content (ie., creating ad hoc templates ...

Template generation of-the data extracted from the base text)(para 113) , and

make the message available to the particular device (ie., event notification service that

passes messages to device)(para 18);

Belfiore does not teach, but Aone teaches

extraction process (ie., event extraction system, fig 2 shows ATTACK target event

template for a sentence)(section 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify Belfiore to include an event extraction system that generates a template for

events as taught by Aone, providing the benefit of Natural Language Processing for

large-scale relation and event extraction system (Aone, Title, Abstract) and data

structure that follow a schema in which the meaning of the communication for intelligent

decisions and inferences made on the based on the meaning of the data (Belfiore,

Abstract section).

Claim 38, Belfiore teaches

A processor (ie., server 120)(para 47); and

a memory (ie., storage, ... memory)(para 22) *containing instructions executable by the*

processor to

receive content including unstructured text addressed to a padicular

device (address of web page requested by user to destination that is processed through

the server)(paragraph 7);,

generate a form containing data extracted from the unstructured text (ie., creating ad

hoc templates ... Template generation)(para 113) ,

and make available to the particular device a notification of the event (ie., event

notification service that passes messages to device)(para 18) .

type at least one event reflected by the unstructured text (ie., fig 2 shows event in

sentence is identified as Type: conflict).

It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify Belfiore to include events as templates for natural sentences where a type is

matched to the sentence and identifies the type of the event as taught by Aone,

providing the benefit of Natural Language Processing for large-scale relation and event

extraction system (Aone, Title, Abstract) and data structure that follow a schema in

which the meaning of the communication for intelligent decisions and inferences made

on the based on the meaning of the data (Belfiore, Abstract section).,

Claim 39, Belfiore does not teach, but Aone teaches

identifies the event in the unstructured text (ie., identifying the words in the sentence

provided to the system)(fig 2)', and

identifies an event type for the event based on stored information reflecting

event types (ie., fig 2 shows event in sentence is identified as Type: conflict).

It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify Belfiore to include events as templates for natural sentences where a type is

matched to the sentence and identifies the type of the event as taught by Aone,

providing the benefit of Natural Language Processing for large-scale relation and event

extraction system (Aone, Title, Abstract) and data structure that follow a schema in

which the meaning of the communication for intelligent decisions and inferences made

on the based on the meaning of the data (Belfiore, Abstract section).

Claim 40, Belfoire does not expressly teach, but Aone teaches

populates fields of a form selected from a set of forms based on the type of

event with the data from the unstructured text (ie., fig 2 shows matching the sentences

with the data types WEAPON – missles).

It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify Belfiore to include events as templates for natural sentences where a type is

matched to the sentence and identifies the type of the event as taught by Aone,

providing the benefit of Natural Language Processing for large-scale relation and event

extraction system (Aone, Title, Abstract) and data structure that follow a schema in

which the meaning of the communication for intelligent decisions and inferences made

on the based on the meaning of the data (Belfiore, Abstract section).

Claim 54, Belfiore teaches

A processor (ie., server 120)(para 47); and

a memory (ie., storage, ... memory)(para 22) for storing *instructions executable by the*

processor to

storing for a client including unstructured text (address of web page requested by user

to destination that is processed through the server)(paragraph 7);,

generate a form in a data representation language including data extracted from the

content (ie., creating ad hoc templates ... Template generation)(para 113) ,

and transmitting to the client a notification including the form (ie., event notification

service that passes messages to device)(para 18) .

Claim 55, Belfiore does not expressly teach, but Aone teaches

populating fields of at least one stored template (ie., fig 2 shows matching the

sentences with the data types WEAPON – missles), and

It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify Belfiore to include events as templates for natural sentences where a type is

matched to the sentence and identifies the type of the event as taught by Aone,

providing the benefit of Natural Language Processing for large-scale relation and event

extraction system (Aone, Title, Abstract) and data structure that follow a schema in

which the meaning of the communication for intelligent decisions and inferences made

on the based on the meaning of the data (Belfiore, Abstract section).

Claim 56, Belfiore teaches

Sending an instruction to prompt a user to cause the client to perform an operation on

data in at least one field of the template (ie., data in stored schema, upon user properly

authenticates, user can update information in the scheme)(para 19).

Claim 57, Belfiore teaches

Sending an instruction to invoke a process associated with an application executed on

the device to perform an operation on data in at least one field of the template

(ie., server sends event notification for schema update service, also, server sends

instructions to client to display results or event information)(para 18,19).

5-2)   Claims 3, 9, 37, 42, 64 are rejected under 35 U.S.C. 103(a) as being

unpatentable over <u>Belfiore</u> et al (as cited above), in view of <u>Aone</u> (as cited above)

further in view of <u>Liddy</u> et al (US 6026388, issued Feb 2000).

Claim 3, 37, 64, Belfiore teaches

(d) filling fields of templates with corresponding information from (ie., fill in fields of

template)(para 50).

Belfiore does not teach but Aone teaches

the content based on a result of the application of the pattern sets to the logical

hierarchical tree, reflecting the linking of any anaphoric expression to its referent, in the

content (ie., event merging – merging coreferring event into a single event)(section

2.3.2),

(b) applying to the logical hierarchical tree extraction pattern sets to recognize

and tag proper names and pre-specified events in the content (ie., tagging modules

relying on pattern based extraction ... recognizes names)(section 2.2.1);

(c) linking any anaphoric expression to its referent, in the content (ie., reference rules

applied to selected auophara whose antecedents ...)(section 2.2)', and

Belfiore in view of Aone does not expressly teach, but Liddy teaches

(a) tokenizing (col 18, line 5) *the content into a logical hierarchical tree representing*

parts of the content (ie., tree representation of query)(col 19, lines 30),

It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify Belfiore to include event merging, tagging modules relying on pattern based

extraction, recognizing names as taught by Aone, providing the benefit of Natural

Language Processing for large-scale relation and event extraction system (Aone, Title,

Abstract) and data structure that follow a schema in which the meaning of the

communication for intelligent decisions and inferences made on the based on the

meaning of the data (Belfiore, Abstract section), further to modify Belfiore in view of

Aone to include tree representation of queries as taught by Liddy, providing the benefit

of a user interface and enhancement for natural language information retrieval (Liddy,

Title, Abstract).

Claim 9, 42, Belfiore in view of Aone does not expressly teach, but Liddy teaches

prompting a user for a request for at least one of

(v) the unstructured text (ie., sign on screen prompts user to sign on. Upon validation

the query screen allows user to request a natural language query, which is equivalent to

claimed language of unstructured text)(col 28, line 41 – col 24, line 13).

It would have been obvious to one of ordinary skill in the art at the time of the invention

to modify Belfiore in view of Aone to include prompting a user and then allowing user to

request a natural language query taught by Liddy, providing the benefit of a user

interface and enhancement for natural language information retrieval (Liddy, Title,

Abstract).

Response to Arguments

Applicant's arguments filed 5/31/05 have been fully considered but they are not

persuasive. Applicant argues that the because the REES article (also known as "Aone"

references as shortened by the Examiner) was published less than one year prior to the

provisional filing date, the article cannot be relied upon as prior art against the present

application. The Examiner disagrees. For a printed publication to be prior art that

precludes an patent, it must have been ... described in a printed publication in this or a

foreign country, **before the invention** (see 35 USC 102(a)). The REES article was

described in a printed publication before the date of the invention (as supported by the

current evidence) of the provisional filing date of 12/06/2000. The REES article was

published 5/4/2000.

The Applicant adds the co-author of the cited REES article to disqualify the

article as prior art. However, the Examiner disagrees because the inventive entity of the

application is not the same as the article. The inclusion of Scott William Bennett makes

the application "by others" as compared to the authors of the article are "Chinatsu Aone"

and "Mila RamosSantacruz".   The MPEP in section 2132.01 states:

III. "BY OTHERS"

"Others" Means Any Combination of Authors or Inventors Different Than the Inventive
Entity

The term "others" in 35 U.S.C. 102(a) refers to any entity which is different from the
inventive entity. The entity need only differ by one person to be "by others." This holds
true for all types of references eligible as prior art under 35 U.S.C. 102(a) including
publications as well as public knowledge and use. Any other interpretation of 35 U.S.C.
102(a) "would negate the one year [grace] period afforded under § 102(b)." *In re Katz*,
687 F.2d 450, 215 USPQ 14 (CCPA 1982).

Thus, the Examiner maintains that the applicant has not overcome the initial

obviousness assertion by the Examiner.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam Sain whose telephone number is 571-272-4096. The examiner can normally be reached on M-F 9-5 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather Herndon can be reached on 571-272-4136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

GS

WILLIAM BASHORE
PRIMARY EXAMINER

8/9/2005